

**2 OBJECTIVES AND SCOPE
OF PILOT TEST**

2 OBJECTIVES AND SCOPE OF PILOT TEST

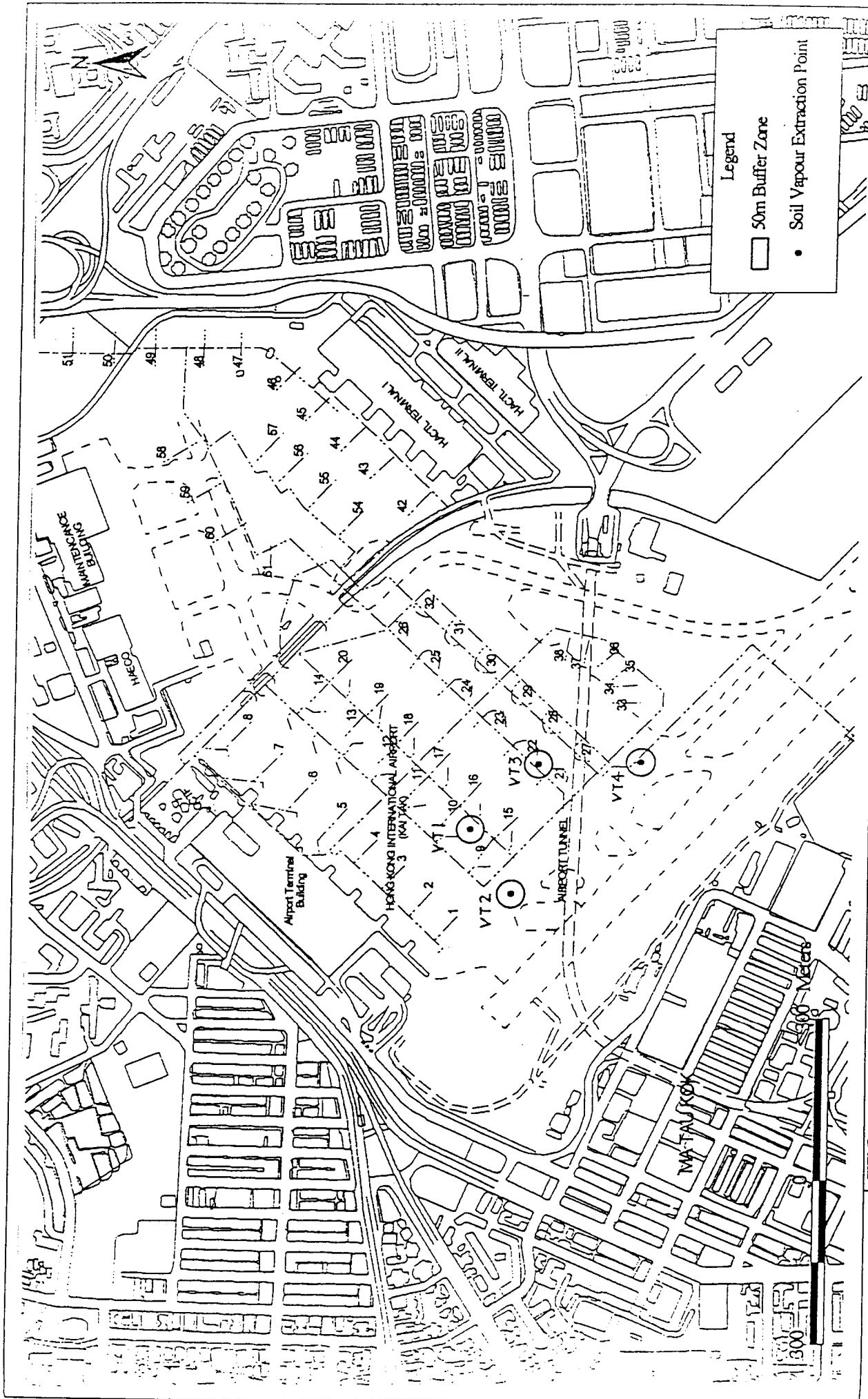
The principal objective of the pilot test was to determine the feasibility of soil vapour extraction (SVE), air sparging (AS) and their combination as a method of soil contamination clean up, and also to gather site-specific design data. Data and information collected during the test were used to:

- 1) determine the Radii of Influence (ROI) of the AS and SVE wells (to indicate the optimum spacing of injection and extraction wells for AS and SVE respectively)
- 2) determine the air injection and extraction flow rates for AS and SVE respectively
- 3) estimate the duration of clean-up operations, and evaluate the relative contribution from volatilisation vs. biodegradation modes
- 4) evaluate other design parameters such as groundwater extraction rate and gas emission treatment
- 5) make provisions to prepare for potential upset of the system

The scope of the pilot test comprised basically four different types of tests:

- 1) short-term and long-term soil vapour extraction (SVE) test
- 2) short-term air sparging (AS) test
- 3) short-term tracer (helium) test
- 4) long-term combined SVE/AS test

SVE testing was conducted at four locations (VT1 to VT4) (Figure 2.1) across the airport apron; and AS, tracer (helium), and combined SVE/AS testings were conducted at VT3 and VT4 only.



Maunsell		Four Testing Locations of Pilot Test		MAUNSELL ENVIRONMENTAL MANAGEMENT CONSULTANTS LTD	
PROJECT NO C418		FIGURE NO Figure 2.1		DATE Dec 1998	
DESIGNED/ CHECKED		DATE 		Eric Lai	